

FORM PTO-1390 (REV. 07-2005)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		EXPRESS MAIL NUMBER <b>EV 728 110 654 US</b>	ATTORNEY'S DOCKET NUMBER <b>036017/US/2 - 475396-00153</b>
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>				U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/553618</b> <small>To be assigned</small>	
INTERNATIONAL APPLICATION NO. <b>PCT/US2003/037114</b>		INTERNATIONAL FILING DATE <b>November 20, 2003</b>		PRIORITY DATE CLAIMED <b>November 20, 2002</b>	
TITLE OF INVENTION <b>SYSTEM, PROCESS AND SOFTWARE ARRANGEMENT FOR DISEASE DETECTION USING GENOME WIDE HAPLOTYPE MAPS</b>					
APPLICANT(S) FOR DO/EO/US <b>BUD MISHRA and THOMAS ANANTHARAMAN</b>					
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other</p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ul> </li> <li>6. <input type="checkbox"/> An English translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ul> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ul style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> had been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ul> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36</li> </ol> <p>Items 11 to 20. below concern document(s) or information included:</p> <ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included</li> <li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 – 1.825</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4)</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information:</li> </ol> <p>PTO-1449 form with one reference, Petition to Revive Unintentionally Abandoned Application and Return Receipt Postcard</p>					

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21. The following fees have been submitted:		CALCULATIONS	PTO USE ONLY
<input checked="" type="checkbox"/> a) Basic national fee (37 CFR 1.492(a)).....		\$300.00	\$ 300
22. <input checked="" type="checkbox"/> Examination fee (37 CFR 492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)--4).....		\$0.00	
All other situations.....		\$200.00	\$ 200
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)--4)		\$0.00	
Search fee (37 CFR 1.445(a)(2) has been paid on the international application to the USPTO as an International Searching Authority.....		\$100.00	
International Search Report prepared and provided to the Office .....		\$400.00	
All other situations .....		\$500.00	\$ 100
<b>TOTAL OF 21, 22 and 23 =</b>		<b>\$ 600</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.			
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE
- 100	/50 =		x \$250.00
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).		\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE
Total claims	17 -20 =	0	x \$50.00
Independent claims	4 -3 =	1	x \$200.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		+ \$360.00	\$
		<b>TOTAL OF ABOVE CALCULATIONS =</b>	<b>\$800</b>
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.		\$400	
		<b>SUBTOTAL =</b>	<b>\$</b>
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).		\$	
		<b>TOTAL NATIONAL FEE =</b>	<b>\$</b>
Fee for recording the enclose assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property		\$	
		<b>TOTAL FEES ENCLOSED =</b>	<b>\$400</b>
		<b>Amount to be refunded:</b>	\$
		<b>charged:</b>	\$

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- a.  A check in the amount \$400 to cover the above fees is enclosed.
- b.  Please charge my Deposit Account No. 50-2054 in the amount of \$ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c.  The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2054. A duplicate copy of this sheet is enclosed.
- d.  Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE: Where an appropriate time limit under 37 CFR 1.494 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.**

SEND ALL CORRESPONDENCE TO:

**CUSTOMER NUMBER 30873**

Dorsey & Whitney LLP  
Intellectual Property Department  
250 Park Avenue  
New York, New York 10177

  
Signature

Gary Abelev, Esq.

Date October 17, 2005

Name

40,479

Registration Number